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**WTO 2004 Agriculture Framework:
Disciplines on Distorting Domestic Support**
by
Lars Brink*
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*Lars Brink is an Economist with Agriculture and Agri-Food Canada/Policy.

Correspondence regarding this paper should be addressed to the authors at:

Agriculture and Agri-Food Canada/Policy
930 Carling Ave., Room 691
Ottawa, Ontario K1A 0C5
CANADA
brinkLa@agr.gc.ca

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WTO 2004 Agriculture Framework:
Disciplines on Distorting Domestic Support

Lars Brink

Agriculture and Agri-Food Canada

Ottawa, Canada K1A 0C5

brinkLa@agr.gc.ca

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WTO 2004 Agriculture Framework:
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Abstract

The July 2004 Agriculture Framework is the basis for negotiations of modalities in agriculture in the WTO. The significant new ideas on domestic support include an Overall Reduction applying to the sum of Total Aggregate Measurement of Support (Total AMS), *de minimis* AMSs, and blue box payments (i.e., all non-green support), tiered harmonizing reductions of overall distorting support and Total AMS, caps on product-specific AMSs, cap on and criteria for blue box payments, lower *de minimis*, and review of green box criteria. This paper assesses how several of these provisions might constrain the future (2014) distorting domestic support of USA, EU, Japan, Canada, Brazil, and China. Future support is projected, paying particular attention to U.S. and EU support. The analysis uses a hypothetical 90-80-70-60 reduction scenario to estimate the remaining entitlements to support and calculates the cuts the six Members can accommodate without affecting projected future support. It also estimates the maximum support that can be used within the commitments, considering that simply summing the Total AMS commitment and all *de minimis* allowances overestimates the amount of support that can be provided (a product's AMS can not at the same time be *de minimis* and counted in Current Total AMS).

The six Members can accommodate large cuts in commitments on overall distorting support and Total AMS. A cut of 75 percent would not bite into the U.S. future support and a 79 percent cut would not constrain future EU-15 support. Large cuts would not force the other four Members to reduce support from what they have notified or provided in recent years. Large cuts will prevent reversals of support reductions. Harmonizing tiered cuts can effectively address the support entitlements of the large subsidizers. Altogether the provisions of the 2004 Framework allow for substantial reductions in distorting support, and the Overall Reduction can be particularly effective. The reduction scenario examined for the six Members reduces their combined usable entitlements to all distorting support by about half (from \$301 bill. in the base period to \$148 bill. in 2014) when applied to Total AMS, *de minimis*, and blue entitlement separately. Applying also the Overall Reduction reduces the combined usable entitlements by a further \$84 bill., bringing their allowed distorting support down to \$65 bill. However, this requires that Members agree to sizeable percentage cuts in the commitments on Overall Reduction and on Total AMS.

WTO 2004 Agriculture Framework: Disciplines on Distorting Domestic Support

Introduction

The July 2004 Agriculture Framework articulates the basis for continued negotiations of full modalities in agriculture in the World Trade Organization (WTO).¹ Modalities are the rules and commitments governing Members' decisions once a new WTO Agreement on Agriculture takes effect. The Framework addresses the three pillars of the existing Agreement on Agriculture (domestic support, market access, and export competition) and introduces other headings, such as least-developed countries, recently acceded Members, and monitoring and surveillance.

The Framework resulted from the inputs of Members since the negotiations under the Doha Development Agenda (DDA) started in 2001. Proposals were submitted in 2002, draft modalities were presented by Ambassador Harbinson in March 2003, and several draft framework texts were prepared before or at the WTO Ministerial meeting in Cancún, Mexico, in September 2003.²

This paper examines the provisions of the July 2004 Framework concerning Overall Reduction and Total Aggregate Measurement of Support (Total AMS) and assesses their effectiveness in constraining the future distorting domestic support of six Members: USA, EU, Japan, Canada, Brazil, and China. Assessing the effectiveness of the disciplines requires estimates of future support, and particular attention is given to estimating future U.S. and EU support. Several reduction scenarios are examined. The findings are expressed as the size of the percentage reductions needed to constrain future distorting support in the subject countries.

The Framework

The Framework retains many of the concepts of the present Agreement on Agriculture, as negotiated in the Uruguay Round. There are also several new ideas of great significance. The following domestic support provisions remain from the present Agreement on Agriculture.

¹ Early on 1 August 2004 in Geneva, negotiators agreed on a "Framework for Establishing Modalities in Agriculture", which is Annex A of a decision of the General Council of the WTO, dated 2 August 2004 (WTO 2004). The Framework, being part of this so-called "July package", is often called the July Framework, the 2004 Framework, or the Agreed Framework.

² Brink (2004a) assesses the disciplines outlined in some of the 2002 proposals. Brink (2004b) assesses the disciplines outlined in the 2003 documents.

Support in favour of agricultural producers is measured through AMS but support measures that meet the criteria of Annex 2 of the Agreement on Agriculture (“green box”, i.e., not or at most minimally distorting) are excluded from AMS.

The commitment is taken on Total AMS, and certain AMS support is excluded from the calculation of Current Total AMS. The excluded AMS support is support that meets the criteria of Art. 6.2 (certain support in developing countries), Art. 6.4 (AMS amounts less than a certain percentage of value of production, i.e., “*de minimis*”), and Art. 6.5 (certain payments under production-limiting programs, i.e., “blue box”).

Special and differential provisions are available for developing countries. This includes longer implementation periods, lower reductions, and access to Art. 6.2.

The significant new ideas on domestic support in the Framework include the following.

Overall reduction: commitment to provide no more than a given amount of distorting support of all kinds. The commitment applies to the sum of Current Total AMS, *de minimis* AMS amounts, and blue box payments.³ It thus covers all domestic support that is not exempt as green box. It is here called Overall Distorting Support, or ODS, for ease of exposition. The commitment amount is arrived at by reducing a base amount of ODS.

The ODS reduction commitment includes a “first installment”: regardless of the size of the yearly reductions in the rest of the implementing period, the first year’s reduction will be a given 20 percent of the Base ODS for most Members. Even for those few Members whose historical blue box payments were greater than 5 percent of the sector’s value of production, the Base ODS for the first installment includes only the 5-percent amount, not the actual historical blue box payments.

The ODS reduction and the reduction in Total AMS will be of a harmonizing nature. This means that Members with larger entitlements to distorting support will carry out relatively larger reductions than other Members. Developed country Members will undertake “a strong element of harmonization” in reducing ODS and Total AMS.

³ The Framework is not clear on whether the overall commitment applies also to Art. 6.2 support of developing countries, although such support is not included in the overall base.

The reductions will be carried out using a tiered approach. Each Member is placed in a particular category or tier, within which all Members undertake the same percentage reduction commitment.

There will be a cap on each product-specific AMS. A methodology will need to be agreed to establish these caps.

There will be a cap on blue box payments for all Members. This cap will be set at 5 percent of the value of production of the agriculture sector in a historical period.

Existing and additional criteria will be negotiated to ensure that only payments that are less distorting than AMS measures will qualify for the blue box.

The *de minimis* percentages will be reduced for all Members, whether developed or developing. Those developing countries that provide almost all their *de minimis* support to subsistence and resource-poor farmers need not reduce the *de minimis* percentage.

The criteria for the green box (Annex 2) will be reviewed and clarified to ensure that only measures with no or minimal distorting effects can qualify for the green box.

The monitoring and surveillance of the disciplines on domestic support will be enhanced, which will include requiring timely and complete notifications.

Analytical Approach

Outline of Analysis

Negotiations under the Framework aim to achieve “substantial reductions in trade-distorting domestic support”, as required in the Doha Ministerial Declaration of 2001. Assessing the effectiveness of the provisions of the Framework thus requires estimating the size of the reductions in trade-distorting domestic support that can be achieved through these provisions.

The analysis follows two approaches. One applies hypothetical reduction scenarios to estimate the remaining entitlements to distorting support for each of USA, EU, Japan, Canada, Brazil, and China. This approach also estimates the maximum amount of such support that can actually be used within the commitments and calculates how much it is reduced by the new commitments. The other approach projects each of the six Members' support in the fairly distant future and calculates the reductions that the Member can take without affecting that projected future support.

The Framework gives only very few numerical values. Assumptions are therefore needed for many key parameters.⁴ For example, base periods will need to be chosen in order to measure the amounts to include in the base for the ODS reduction. This applies to the *de minimis* component and the blue box component, and the base periods for these two components need not be the same. Establishing base amounts is also difficult because the annual notifications of many Members are not up to date. Thus, even if a period had been set in the Framework, an absence of notified data might require assumptions about the relevant amounts in the non-notified years.^{5 6}

Major Assumptions

The *de minimis* component and (for most Members) the blue box component of the Base ODS are certain percentages of the value of production in the agriculture sector as a whole. The average value of production in 2000-02 is arbitrarily chosen to establish the *de minimis* and (except for the EU) the blue box component of the Base ODS.

For the ODS reduction the analysis needs to assume the definition of tiers for the harmonizing reductions, the placement of each Member in a given tier, and the depth of cut in each tier. For the reduction of Total AMS the corresponding assumptions are needed. The Framework does not require the same tiers, placement in tiers, or depths of reduction for ODS and Total AMS.

⁴ The Framework gives numerical values of only two parameters: the cap on ODS after the first installment has been made (80% of the applicable base), and the cap on blue payments (5% of a value of production).

⁵ The absence of notifications for recent years from many Members points up the importance of the Framework provisions for monitoring and surveillance, which will amend Article 18 of the Agreement on Agriculture to enhance monitoring through timely notifications.

⁶ Blandford (2005) analyzes the Framework using notified data and discusses several provisions not examined in the present analysis (such as caps on product-specific AMSs, green box, and treatment of developing countries).

The analysis also needs assumptions about the reductions in *de minimis* (taken to mean reductions in the *de minimis* percentages from the 5 percent and 10 percent of the Agreement on Agriculture, and China's 8.5 percent), and which, if any, of the six Members need not reduce *de minimis*.

It is assumed that implementation of the new commitments under the DDA agreement on agriculture will start in 2008 and be completed in 2014, i.e., an implementing period of seven years. The actual end year of the implementing period is not critical to the analysis, only that it be far enough into the future to allow for a reasonable length of implementation (the Uruguay Round commitments were implemented over six years by developed and ten years by developing countries). While no differentiation between the implementing periods of developed and developing countries is assumed in this analysis, such differentiation will apply in reality, since the Framework stipulates longer implementation periods for developing countries.

Assumptions are also needed about the value of production in 2014 of each of the six Members. This is because the 2014 value of production determines the *de minimis* allowances that will apply in that year. It is assumed that the present rules for *de minimis* exemption will apply in the DDA agreement on agriculture, although the *de minimis* percentages will in many cases be lower.

The analysis establishes the 2014 end points of the reduction commitments and projects the support in 2014 without considering the time path through the implementing period. This simplifies the analysis, such as ignoring the role of the first installment of the ODS reduction.

The data and methods for estimating base amounts and projections for 2014 are introduced in Annex A, with details shown in Tables 1, 2 and 3. The more specific procedures and data used for 2014 estimates for USA and EU are introduced in Annex B, with details in Tables 4, 5, 6 and 7. Although Members' commitments are usually taken in their own currency (US\$ for Brazil), this analysis also presents many amounts converted to U.S. dollars to facilitate comparisons.

Overall (ODS) Reduction

Nature of ODS Reduction

The ODS reduction consists of reducing the Base ODS. The Base ODS is the sum of four components: (1) the Final Bound Total AMS commitment (in a Member's Schedule of

commitments), (2) the entitlement to blue box payments (5 percent of the value of production in a particular period; blue payments in some period for the EU), (3) the sum of all product-specific *de minimis* allowances in a particular period (the sum of the value of production of all individual products is assumed to equal the value of production of the sector as a whole), and (4) the non-product-specific *de minimis* allowance.⁷

The end point of the ODS reduction becomes the fixed ceiling commitment in 2014 for the sum of four components: (1) the 2014 Current Total AMS, (2) the 2014 blue box payments, (3) the sum of any product-specific AMS amounts exempted from Current Total AMS as *de minimis* in 2014, and (4) the non-product-specific AMS if exempted as *de minimis* in 2014.

Overall (ODS) Base

The estimated amounts of Base ODS for the six Members are shown in Table 8 in the relevant currency and US\$. Base ODS for each of USA, Japan, and Canada is the sum of the Final Bound Total AMS commitment and 15 percent of the agriculture value of production in 2000-02, the assumed base period. The 15 percent comprises 5 percent of value of production for product-specific *de minimis*, 5 percent for non-product-specific *de minimis*, and 5 percent for blue box entitlement. The EU Base ODS consists of the Final Bound Total AMS commitment, 10 percent of value of production for the *de minimis* allowances, and the blue box payments made in 2001-03 (assumed to be the “recent representative period” to be negotiated).

The EU-15’s Final Bound Total AMS commitment of about \$83 bill. (€67 bill.) is the highest among all WTO Members. It is almost twice as large as the \$36 bill. commitment of Japan and more than four times larger than the \$19 bill. commitment of USA. The EU-15 value of production in agriculture is the largest in the world, larger even than of China. The agriculture value of production in USA is the third largest in the world, followed by that of Japan and India. (See Annex A and Table 1 for Value of Production data).

As a result of combining the very large Final Bound Total AMS commitment with a percentage of a very large agriculture value of production, and very large blue box payments, the EU-15 Base ODS is considerably larger than the Base ODS of either USA or Japan. The Base ODS of USA and Japan are, however, considerably larger than those of Canada and Brazil.

⁷ Some may interpret the Framework’s “permitted *de minimis* level” differently.

The Base ODS of China is very large, in spite of China having a Total AMS commitment of zero. This results from China's large agriculture value of production (approaching that of the EU-15), in combination with a *de minimis* percentage of 8.5 percent (i.e., larger than 5 percent) for each of the product-specific AMS amounts and for the non-product-specific AMS. While Brazil's value of production is not among the largest in the world, and its Final Bound Total AMS commitment is relatively small, the *de minimis* percentage of 10 percent contributes to raising its Base ODS.

An obvious tiering for ODS reduction thus results for developed countries, based on their absolute amount of Base ODS.⁸ The EU is alone in a first tier, USA and Japan together in a second tier, and Canada in a third tier. Brazil as a developing country and China as a relatively recently acceded Member could be placed in a fourth tier.

Tiered Harmonizing Overall reduction

In order to illustrate the effects of a tiered harmonizing ODS reduction, percentage reductions need to be ascribed to each tier. This analysis uses a 90-80-70-60 scenario for this purpose (see Table 8). Other harmonizing reduction scenarios would be, for example, 95-85-75-65 or 75-67-60-55 or 80-60-40-20.

The 90-80-70-60 scenario means that the top tier (EU) would commit to a ceiling on ODS at the end of the implementing period equal to 10 percent of its Base ODS. USA and Japan would in this scenario commit to ceilings equal to 20 percent of their respective Base ODS. Canada, in the third tier, would commit to a ceiling of 30 percent. Brazil and China, one a developing country and the other a relatively recently acceded Member, would reduce the Base ODS by 60 percent and commit to a ceiling of 40 percent of the Base ODS base at the end of their implementing period (the implementing period is assumed in this illustration to be the same for all Members).

The harmonizing effect of this scenario is seen by comparing the EU and U.S. Base ODS and the resulting ceiling commitments on ODS (Table 8). The EU Base of \$142 bill. is about three times larger than the U.S. base of \$48 bill. After the 90 and 80 percent reductions, respectively, the EU commitment of \$14 bill. on ODS is only 1.4 times larger than the U.S. commitment of \$10 bill.

⁸ Some argue that the placement in tiers should be based on the size of Base ODS in relation to the value of production (i.e., relative size of Base ODS). For the four developed country Members in this analysis, such an approach would under most assumptions result in the same placement as an absolute-based approach. A small developed country with a relatively large Total AMS commitment could be placed differently.

As a result of having the second highest Base ODS, combined with a reduction of only 60 percent, China would in this illustrative scenario obtain as large a ceiling commitment on ODS as \$25 bill. This is two-and-a-half times larger than the commitment of either USA or Japan and almost twice as large as the ceiling commitment of the EU-15.

Total AMS Reduction

Nature of Total AMS Reduction

The reduction of Total AMS need not use the same number of tiers or the same rules to place Members in tiers as the ODS reduction. However, this analysis does assume that developed countries fall in one of three tiers also for Total AMS reductions, based on the absolute amount of the Final Bound Total AMS, and developing countries are placed in a fourth tier. China has no Final Bound Total AMS to reduce and is not placed in any tier.

The bases for the Total AMS reductions are shown in Table 9. These are the Final Bound Total AMS commitments from Members' Schedules.

Tiered Harmonizing Total AMS Reductions

For the Total AMS reductions, the same harmonizing scenario is assumed as for the ODS reduction, i.e., 90-80-70-60. The assumption of identical reductions for ODS and Total AMS simplifies the exposition of the scenarios. However, there are good reasons why the ODS reduction should be a larger percentage than the Total AMS reduction. This is because the Base ODS in reality will have even more slack built in than the Final Bound Total AMS. Current Total AMS amounts fall at least somewhat short, and in some cases much short, of the Final Bound Total AMS. This slack will be present also in the commitment on ODS. In addition some more slack is built in because no Member is using the *de minimis* and blue box allowances to their maximum, in spite of such allowances in their entirety being included in the Base ODS.

The harmonizing feature of the assumed reduction scenario is equally apparent for the Total AMS commitments as for the commitments on ODS (Table 9). The Total AMS commitment for the EU would be \$8.3 bill. under its 90 percent reduction. This is only slightly more than twice as large

as the U.S. commitment, resulting from a 80 percent reduction. (The EU base was more than four times larger than the U.S. base).

Estimating Possible Reductions

Projecting Distorting Support in 2014

A second approach to analyzing the disciplines on trade-distorting domestic support consists of projecting the amounts of support subject to each commitment at the end of the implementing period, i.e., in 2014. Comparing these 2014 amounts of Current ODS and Current Total AMS to the Base ODS and the Final Bound Total AMS indicates how large a reduction can be taken without forcing a reduction in the support the Member is projected to otherwise provide in 2014.

The composition and levels of distorting support in 2014 are projected as a continuation of recent notified support. It is assumed, however, that the *de minimis* percentages in 2014 will be half of the present percentage (not for China), possibly moving some AMS amounts into 2014 Current Total AMS. The validity of such projections is reduced because the underlying notifications may refer to years as long ago as 1997/98, as in the case of Brazil. Separate projections are therefore made for USA and the EU, two Members with large entitlements who also have notified large amounts of distorting support in recent years.

USA: Projecting 2014 Support

In USA major policy adjustments tend to be introduced with intervals of about 5 to 7 years. The 2002 farm legislation instituted two payment programs that are expected not to be claimed as exempt from Current Total AMS on green box grounds, viz., Counter-Cyclical payments (CCP) and marketing loan programs (mainly Loan Deficiency Payments, LDP).⁹ It is assumed that these two price-related payment programs will remain in 2014. In fact, it is assumed that the farm law of 2007 will retain the same structure of support as the 2002 law. Very little information is available that would support other assumptions about the structure of U.S. policy support in 2014.

The CCP and LDP payments have fluctuated considerably in the first few years since 2002, mainly as a result of different price changes for different crops. Large payments were made for

⁹ Other elements of the marketing loans program are marketing loan gains and certificate exchange gains.

wheat and corn for the 2004/05 crop year, when market prices were low. For 2014 the baseline projections of the U.S. Department of Agriculture indicate higher prices for major crops than in 2004. Consequently the price-related payments (i.e., CCP and LDP) are projected to be much smaller in 2014 than in 2004. At the same time, such projections can not represent the unknown shocks likely to affect market prices in 2014. Lower-than-projected prices in 2014, whatever the reason, would generate larger CCP and LDP payments under the assumed continuation of the 2002 legislation. No such “spike” in the CCP is assumed here. A reduction of the “loan rates” set by policy might reduce the amount of LDP payments and increase the amount of CCP payments.

While support measures under the 2002 farm legislation have not yet (May 2005) been notified to the WTO, it is widely assumed that USA will classify LDP as product-specific AMS support and CCP as non-product-specific AMS support (See Annex B for details of the 2014 projection.)

EU: Projecting 2014 Support

The EU made several policy decisions in 2003 and 2004 that changed key policy parameters. The changed parameters are assumed to apply in 2014. This concerns several product sectors that account for a large part of notified EU support, such as dairy, rice, tobacco, cotton, and olive oil. Additional decisions are expected for sugar. Reform of the fruit, vegetable and wine sectors has also been mentioned, but no such reform is assumed in this analysis. The 2003 and 2004 policy decisions reduced much of the future AMS support and blue box payments and increased the payments expected to be claimed as green. For example, sizeable reductions of market price support to beef, butter, skim milk powder, and sugar result from lower regulated prices. Intervention buying of rice and butter will be eliminated or capped. Payments classified as AMS support for olive oil, tobacco, and cotton will be reduced significantly. (See Annex B for details.)

Other Members: Projecting 2014 Support

Brazil. Since Brazil has not notified for a recent year, it is assumed that Brazil will in 2014 provide the same amount of trade-distorting domestic support as in 1997/98. This amount is low, both in relation to Brazil’s Total AMS commitment and to the size of Brazil’s agriculture sector.

Canada. Canada’s latest notification is for 2000, showing a Current Total AMS that is low in relation to both Canada’s Total AMS commitment and to the size of its agriculture sector.

However, the need to address back-to-back droughts in 2002 and 2003 and the effects of discovering BSE in 2003 and 2004 has increased the Current Total AMS in those years. This will need to be taken into account when comparing the base amounts to the projected 2014 amounts. The issue is essentially whether Canada's 2014 support will be similar to its 2000 support (known from notification), similar to its 2004 support (possibly inferred from 2003 and 2004 support policy decisions), or something else.

Japan. Japan has uniformly reduced or abolished the support prices used in the market price support it reports in yearly notifications. The increases in payments are smaller than the reductions in market price support, resulting in slowly declining Current Total AMS. It is assumed here that this trend will be continued.

China. China has not notified any domestic support since its accession to the WTO in 2001. While it is known that some kinds of support have been increased recently, China is committed not to exceed its *de minimis* allowances on AMS support. The 1996-98 levels of support are assumed to be provided in 2014, well below even half of the present *de minimis* thresholds.

The Possible Percentage Reductions

The estimated 2014 Current ODS and the 2014 Current Total AMS are expressed as percentages of their respective bases in Table 10.¹⁰

The 2014 Current ODS in USA would correspond to 25 percent of the Base ODS. The corresponding percentage for the EU would be 21 percent. USA would thus be able to commit to reducing ODS by 75 percent, without needing to reduce the support that is projected to be provided if the 2002 farm legislation continues to apply in 2014.¹¹ Such a reduction commitment would, however, make it impossible for USA to increase payments in 2014 in response to a price

¹⁰ "Current ODS" (Overall Distorting Support) is not defined in the Framework. Future monitoring of Members' implementation of their commitments on overall support will require notification of such a variable. It would parallel the Current Total AMS, which is defined in the Agreement on Agriculture. Current ODS would exempt neither blue box payments nor *de minimis* AMS amounts nor, perhaps, certain support in developing countries.

¹¹ The size of the possible reduction may be underestimated by a few percentage points. The 2014 projection of CCP (\$1.8 bill.) uses the USDA Baseline projection of February 2004. The fiscal year 2006 President's Budget of February 2005 indicates a much lower 2014 CCP projection (\$0.5 bill.).

drop. The reduction commitment would prevent a repetition of the increase in price-related payments seen in response to the 2004 price decline.

The EU would be able to commit to reducing ODS by 79 percent and still be able to provide the distorting support in 2014 that is projected to remain after the CAP reforms decided and proposed in 2003 and 2004. Such a reduction commitment would, however, prevent a reversal of these policy reforms to the pattern of support seen in the late 1990s.

Similarly, USA could commit to reducing Total AMS by 60 percent without impairing its ability to grant support in 2014 according to the provisions of the 2002 farm law (Table 10). The EU could commit to reducing Total AMS by 70 percent without constraining its capacity to provide support in accordance with the full implementation of 2003 and 2004 CAP reforms.

Interpreting Table 10 in the same way for the other Members gives equally forceful findings.

Japan would be able to reduce ODS and Total AMS commitments by, respectively, 84 percent and 82 percent while providing the same amounts of support as in 2001.

Canada seems to have considerable room below its bases (possible cuts in both ODS and Total AMS commitments by 80 and 75 percent, respectively). However, this assumes a continuation of the same amounts of distorting support as in 2000. In more recent years non-green support in Canada has been higher than in 2000 as a result of back-to-back droughts and BSE outbreaks. The reductions that would be possible without reducing support below that of recent years would thus be smaller than shown in Table 10.

Brazil would be able to reduce ODS and Total AMS commitments by 95 percent and 91 percent, respectively, and then provide the same amounts of support as in 1997/98. If distorting support has been increased in Brazil since 1997/98, the possible percentage reductions could be smaller. However, the value of production in Brazil is assumed to increase rapidly. This raises Brazil's *de minimis* allowance, making it possible to provide an increasing amount of AMS support within a given commitment on Total AMS.

China would be able to reduce its commitment on ODS by 94 percent and still provide as much distorting support as in 1996-98. China's policy support to farmers is now

increasing rapidly, but it is not clear how this might be represented in its measurement of ODS (e.g., some of the increase is in the form of tax reductions and some of it may be green). However, China would be able to take a large percentage cut in its commitment on ODS without having to reduce such support in 2014 from present amounts.

Uncertainties

Some uncertainties attach to these findings. The March 2005 outcome of the WTO dispute on U.S. cotton disqualifies certain U.S. payments from the green box. If these payments without policy change continue in 2014, they need to be included in Current ODS and possibly Current Total AMS of USA. The percentage reductions indicated above would make such a shift from green to non-green classification impossible. Similar issues might arise with the EU Single Farm Payment. Reductions of the size indicated here would effectively reduce U.S. and EU distorting support below what could otherwise have been provided in 2014. On the other hand, if the policy measures found or thought to be non-green were to be changed so they meet the green box criteria, the above percentage reductions would only lock in the present support pattern.

EU CAP reform along the lines of the 2003 and 2004 reforms has not been assumed for the fruit, vegetable and wine sectors by 2014, although Commissioners have mentioned such reforms. If support policy for these sectors were to be changed, the EU-15 Current ODS and Current Total AMS in 2014 might be, say, € bill. lower. This would allow EU-15 reductions to be several percentage points larger than shown above, without biting into projected actual distorting support. Exploratory comparisons suggest that the conclusions would be largely similar if data had been developed for EU-25 instead of EU-15. The 2005 EU-25 Total AMS commitment is unknown.

Estimating the Effective Reduction in Distorting Domestic Support

Constraining ODS vs. Constraining Separate Components of Distorting Support

Experience with the Uruguay Round Agreement on Agriculture shows that, while Total AMS commitments were reduced, many Members exempt significant amounts of distorting support from commitment as blue, *de minimis*, and Art. 6.2 support. The Framework requirement to reduce ODS allows no exemptions from the commitment and has the potential to constrain more

effectively the amount of distorting support. The Final Bound commitment on ODS indicates the size of each Member's entitlement to distorting support at the end of DDA implementation.

The constraints on the individual components of distorting domestic support will work in parallel with the ODS reduction commitment. They include the reduction in the Total AMS commitment and the reduction in *de minimis* percentages. The cap on blue payments will also, for the EU, reduce that component of distorting support. Comparing the sum of reduced support that can be provided under each component with the reduced commitment on ODS will indicate how much more the reduction commitment on ODS constrains distorting support, beyond what is achieved by the combination of constraints on the individual components.

Measuring the Sum of the Components of Distorting Support

The future entitlement to distorting support, without exemptions, is given by the 2014 ODS caps (Table 8). The calculation of the sum of entitlements to such support under each component (Total AMS, *de minimis*, and blue) is complicated by the interaction between the *de minimis* rules and Current Total AMS. Simply summing the Total AMS commitment, the non-product-specific *de minimis* allowance, and the sum of product-specific *de minimis* allowances overestimates the amount of distorting support that can actually be provided. The overestimation results from the fact that the AMS for a given product can not at the same time be exempt as *de minimis* and be counted in Current Total AMS.¹²

The interaction between *de minimis* and Current Total AMS is therefore assumed to be managed as follows: (1) Current Total AMS equals the Total AMS commitment, (2) non-product-specific

¹² The composition of a Member's future Current ODS is likely to differ from the composition of its Base ODS as per the Framework. The Base ODS adds entitlements (Final Bound Total AMS and permitted *de minimis* level), whether they were used in the base period or not. In the future, product A's AMS will be, depending on its size, either (i) smaller than product A's *de minimis* allowance (which depends on product A's future value of production and the *de minimis* percentage) and thus not part of Current Total AMS, or (ii) larger than product A's *de minimis* allowance and thus part of Current Total AMS. A product's AMS cannot at the same time be both *de minimis* and part of Current Total AMS. It must be one or the other. Since the calculation of Base ODS uses entitlements, not actual historical product-specific AMS amounts, the either-or status does not affect the Base ODS amount. Roberts (2005) and others have suggested that the Base ODS be set by reducing the amount, calculated in accordance with the Framework, by some amount based on historical notifications (such as the sum of the unused *de minimis* allowances for products whose AMS amounts contribute to the base period Current Total AMS). This would establish future commitments partly on the basis of past "applied" support, in addition to the Framework procedure of using only existing commitment and entitlements calculated from the base period value of production. It rewards a Member whose historical Current Total AMS of \$X derives from only a few product AMSs and penalizes a Member whose historical Current Total AMS of the same \$X derives from many product AMSs.

AMS equals the non-product-specific *de minimis* allowance, (3) product-specific AMS amounts for products accounting for a given share of the sector's value of production are all equal to each product's *de minimis* allowance, and (4) product-specific AMS amounts for products accounting for the other share of the sector's value of production make up the Current Total AMS. This "perfect management" of the entitlements to distorting support allows the calculation of maximum AMS support. This amount indicates, under the given assumptions, the maximum sum of Current Total AMS and *de minimis* exemptions that can be achieved in practice.

Adding the blue box entitlement (5 percent of value of production in 2000-02) and the maximum AMS support yields the Maximum Distorting Support (MDS) the Member can provide under "perfect management".¹³ If MDS is less than the reduced commitment on ODS, MDS is the effective limit on distorting support (expressed differently, the reduction in ODS commitment is not large enough to make a difference).¹⁴ On the other hand, if MDS is larger than the reduced commitment on ODS, it is the ODS commitment that is effective in reducing distorting support.

MDS in this analysis is calculated as a sum of components:

$$\begin{aligned} \text{Maximum Distorting Support} = & \\ & \text{Total AMS commitment} + \\ & + \text{blue box commitment (i.e., 5\% of the sector's historical value of production)} + \\ & + \text{product-specific } de \text{ minimis allowances for products accounting for an arbitrary} \\ & \text{50\% of the sector's current value of production (100\% for China)}^{15} + \\ & + \text{non-product-specific } de \text{ minimis allowance} \end{aligned}$$

The 50 percent of the sector's current value of production is an arbitrary choice. It is not possible to predict whether a Member in 2014 will concentrate its AMS support on a few products (thus

¹³ Brink (2004a and 2004b) uses MDS to evaluate the support entitlements resulting from provisions introduced earlier in the negotiations.

¹⁴ Interestingly, in this case the Member will not be able to provide as much distorting support as indicated by the ODS commitment. The Maximum Distorting Support (MDS) falls short of the ODS commitment by the sum of the unusable product-specific AMS *de minimis* allowances.

¹⁵ China's Total AMS commitment is zero and Current Total AMS can only be zero. The either-or situation for product-specific AMS amounts does therefore not arise, and MDS equals the ODS commitment.

forgoing *de minimis* exemptions on these few products) or distribute its AMS support over many or all products in such small and managed amounts that all the *de minimis* allowances are used.¹⁶

Effectiveness of Constraining ODS vs. Constraining Components

The reduction commitment on ODS, at the reduction percentages assumed in this analysis, constrains distorting support to a significantly lower amount than the corresponding sum of the components of distorting support (i.e., where each component is assumed to be constrained according to the same scenario as the reduction commitment on ODS). (See Table 11).

For example, consider the USA. The U.S. Base ODS is \$48 bill. and the Base MDS is \$43 bill.¹⁷ The 80 percent ODS reduction assumed for USA brings the 2014 ODS commitment to \$10 bill. (a reduction by about \$39 bill. from \$48 bill.). Among the components of distorting support, Total AMS is reduced also by 80 percent, the *de minimis* percentages are cut by half, and the cap on blue is fixed. The sum of these constrained components, i.e., the 2014 MDS, is \$22 bill. This is a reduction of only about \$21 bill., or 49 percent, from the Base MDS of \$43 bill.

However, the sum of distorting support, whether Current Total AMS, *de minimis*, or blue, cannot exceed the ODS commitment of \$10 bill. in 2014. The \$10 bill. is the effective constraint on the sum of the components, since it is smaller than the \$22 bill. sum of the constraints on the components. The ODS reduction commitment effectively reduces the 2014 MDS by a further \$12 bill. (29 percentage points) below the sum of what would have been allowed under the constraints on the individual components of distorting support (Total AMS, *de minimis*, and blue).

For the other five Members, the additional reduction in distorting support resulting from the ODS reduction ranges from 9 to 69 percentage points. In total for the six Members, the allowed distorting support is reduced by a further 28 percentage points below what would have been allowed without the ODS reduction commitment. The combination of reducing Total AMS,

¹⁶ E.g., the EU notified larger than *de minimis* AMS on products making up 48% of the sector's value of production in 2000, and USA on products making up 32% of the sector's value of production in 2001. There is no basis for assuming that these particular percentages will apply also in 2014.

¹⁷ The difference between Base ODS and Base MDS is the sum of product-specific *de minimis* allowances on products accounting for half of the sector's value of production, i.e., 5% of about \$100 bill.

reducing *de minimis* percentages, and capping blue reduces the usable entitlements to distorting support (i.e., MDS) from \$301 bill. to \$148 bill., a reduction by \$152 bill. The ODS reductions, according to the 90-80-70-60 reduction scenario, achieve a further cut of \$84 bill. in the entitlements to distorting support. This is evidence that the ODS reduction commitment, with a large enough percentage reduction, is a powerful instrument in shrinking the entitlements to distorting support to less than would be allowed after reducing separately the Total AMS by the same percentage, halving the *de minimis* percentages and capping blue.¹⁸

Conclusions

The projections of support into the future (2014) indicates that the six Members (USA, EU, Japan, Canada, Brazil, China) can accommodate forceful percentage cuts in commitments on Overall Reduction (ODS) and on Total AMS. A 75 percent cut would not bite into the amounts of 2014 support that USA is projected to provide under continued policy. A 79 percent cut would not constrain the support that the EU is projected to provide in 2014 under known policy changes. Nor would large cuts in commitments force other Members to reduce distorting support from what they have provided in recent years (Japan, Canada, Brazil, China). Large cuts will, however, prevent reversals of policy. For example, USA and the EU would not be able to raise the amounts of distorting support to the levels seen in recent years.

The analysis also shows that harmonizing tiered cuts can effectively address the entitlement to distorting support of the large subsidizers. A large part of the reduction in distorting support is of course accounted for by the policy changes already decided or proposed by the EU (the analysis assumes that the Single Farm Payment qualifies as green box support). However, by committing to sufficiently large reductions in distorting support, the EU would lock in these reforms.

Altogether the provisions of the 2004 Framework can allow for substantial reductions in distorting domestic support. This is especially the case for the Overall Reduction of all distorting

¹⁸ Intuitively this outcome is explained as follows. The ODS reduction reduces all entitlements to distorting support, without exceptions, by 90 percent (or 80 or 70 or 60 percent, depending on the Member and the scenario). The corresponding constraints on the components impose the 90 percent reduction only on Total AMS, while the exemptions from Total AMS are not reduced at all (blue box, for most Members) or only by 50 percent (the percentages that determine the *de minimis* allowances, for many Members). Even with as low a reduction in ODS and Total AMS as 50 percent, the ODS commitment is the binding constraint, since only two of the elements (Total AMS and *de minimis* allowances) are cut by half, while the blue entitlement is not reduced (this does not hold for the EU, whose Base ODS includes a large amount of historical blue payments). This generalization is based crucially on the assumptions that the percentage reductions in ODS and Total AMS are equal and that the *de minimis* percentages are cut in half.

support. The reduction scenario examined for six Members reduces their combined usable entitlements to all distorting support by about half (from \$301 bill. in the base period to \$148 bill. in 2014) when applied to Total AMS, *de minimis*, and blue entitlement separately. Applying also the Overall Reduction reduces the combined usable entitlements of these six Members by a further \$84 bill., bringing their allowed distorting support down to \$65 bill. This is about 20 percent of their base period entitlement. However, this requires that Members agree to sizeable percentage cuts in the commitments on Overall Reduction and on Total AMS (a 90-80-70-60 scenario was examined here). A deep Overall Reduction effectively reduces the entitlements to distorting support to smaller amounts than would be allowed under separate reductions in the Total AMS commitment and *de minimis* percentages and the cap on blue.

The Framework thus has the potential to allow the negotiation of “substantial reductions in trade-distorting domestic support”, as called for in the Doha Ministerial Declaration. Delivering on this potential requires large percentage cuts in commitments on Overall Reduction and Total AMS.

References

- Blandford, David (2005), “Disciplines on Domestic Support in the Doha Round”, paper prepared for the International Food and Agricultural Trade Policy Council, May (unpublished draft).
- Brink, Lars (2004a), “Assessing the 2002 Proposals of the United States, Canada and the Cairns Group for WTO Discipline on Domestic Support”, Working Paper #04-1, International Agricultural Trade Research Consortium, April 2004. Available at www.iatrcweb.org
- (2004b), “Assessing Domestic Support Provisions of the 2003 Draft Texts in WTO Agriculture Negotiations”, Working Paper #04-2, International Agricultural Trade Research Consortium, August 2004. Available at www.iatrcweb.org
- Roberts, Ivan (2005), WTO Agreement on Agriculture – The Blue Box in the July 2004 Framework Agreement”, ABARE eReport 05.4, Canberra, March. Available at www.abareconomics.com/pages/products/products.htm
- WTO (World Trade Organization) (2004), “Doha Work Programme – Decision Adopted by the General Council on 1 August 2004”, WT/L/579, 2 August 2004. Available at www.wto.org/english/tratop_e/dda_e/draft_text_gc_dg_31july04_e.htm

Annex A: Data for Estimating Base Amounts and Projecting to 2014 (Tables 1, 2 and 3)

Estimates of some support components (blue payments) and value of production, along with data on commitments and *de minimis* percentages, underlie the establishment of base amounts for the 2000-02 period assumed in this analysis. Estimates of the corresponding variables for 2014 are also derived. Exchange rates are needed for the expression of key variables in the common currency of U.S. dollars to facilitate comparisons. The data sources are briefly introduced below. Table 1 gives the detailed data. Table 2 uses this data to calculate Base ODS, calculate the ODS reduction scenario, and project 2014 ODS. Table 3 uses the data to calculate Base MDS and project 2014 MDS. Most results are expressed in considerably rounded form, since reasonable assumptions and results are at least as important in this analysis as high precision.

Value of production. For 2000, 2001, and 2002, from domestic support notifications, OECD Producer Support Estimate (PSE) data base, and national statistics. For 2004, from national projections or assumptions about change from 2000-02. For 2014, from assumed growth rates from 2000-02 or 2004.

De minimis percentages. For 2000-02, from the Agreement on Agriculture (5%: USA, EU, Japan, Canada; 10%: Brazil) and WT/ACC/CHN/38/Rev.3 (8.5%: China).

Exchange rates. Mid-market exchange rate observed between local currency and U.S. dollar on October 6, 2004. Source: <http://www.xe.com/ucc/>

Annex B. Details of 2014 Support Estimates for USA and EU-15 (Tables 4, 5, 6, 7)

The estimates of support in 2014 are presented in depth for USA and the EU-15, given the large amounts of the support involved. Product-specific detail of Current Total AMS for USA is shown in Table 4 and for EU-15 in Table 5. The projected AMS amounts for the major products making up the 2014 projection of Current Total AMS are shown in Table 6. The calculations of the base amounts, 2014 support and the possible cuts are shown in Table 7.

USA

The data underlying the U.S. Current Total AMS has been notified for 2000 and 2001. Table 6 uses this data in summarized form along with corresponding data for 2004 and 2014. The projections are based mainly on the USDA Baseline of February 2004. The price gaps for market price support estimates are based on assumed unchanging administered prices from 2004 under the 2002 Farm Bill and are multiplied by the projected 2014 production. The payment support in 2014 is assumed to comprise mainly loan deficiency payments and marketing loan gains as projected in the USDA 2004 Baseline. The 2014 *de minimis* thresholds are based on value of production projections from the USDA 2004 Baseline, using an assumed percentage of 2.5%.

Counter-Cyclical Payments in 2014 are assumed not to be part of Current Total AMS, either because they might be claimed as blue or claimed as non-product-specific AMS, which would be *de minimis* (any justification for either claim is not clear). It is also assumed that Direct Payments in 2014 will not be part of Current Total AMS (whether claimed as green, blue or *de minimis* non-product-specific AMS).

EU-15

The projection of 2014 support assumes that EU policy, as changed under Agenda 2000, will remain in effect in 2014, unless changed by the 2003 and 2004 CAP reforms (the latest notification is for 2001/02). The 2003 and 2004 changes are assumed to remain in effect in 2014 (mainly dairy, rice, tobacco, cotton, and olive oil). Some changes involve reducing or eliminating intervention prices or capping intervention quantities. Sugar policy is assumed to change along the lines of the early 2004 EC proposal. These and other changes may, depending on the interpretation of many details, enable the EU-15 to calculate a much smaller Current Total AMS in 2014 than in recent years. While market oriented reforms of the fruit, vegetable and wine sectors are possible, no such reforms are assumed here.

A large part of recent payments notified as blue is assumed to be claimed as green in the future, being part of the Single Farm Payment (SFP). The future amount that is assumed to be claimed as blue is thus much smaller than recent notified blue payments.

Table 1. Data for Estimating Key Variables and Reduction Scenario on Total AMS

	USA	EU-15	Japan	Canada	Brazil	China
A. Exchange rate	not appl.	0.8126 EUR/USD	111.273 JPY/USD	1.2587 CAD/USD	not appl.	8.2768 CNY/USD
	US\$ bill.	€ bill.	¥ bill.	C\$ bill.	US\$ bill. IBGE data: agr GDP/XR	RMB bill.
B. Value of production						
2000	189.5 USA/51	243.4 EEC/49	9,122.4 JPN/98	31.7 CAN/53	42.8 78.3/1.831	
2001	198.5 USA/51	251.2 97.2% of 3.1.5	8,881.3 JPN/108	34.2 author est.	37.9 89.3/2.3531	2,338.6 ChNatBurStats
2002	194.0 USDA B.line	245.8 97.2% of 3.1.5	8,929.7 JPN/108	33.1 author est.	35.9 104.9/2.9235	
average 2000-02	194.0	246.8	8,977.8	33.0	38.9	2,338.6
2004	206.9 USDA B.line	246.8 same as 00-02	8,798.2 98% of 00-02	33.0 same as 00-02	38.9 same as 00-02	
Growth percent.	not appl. 10% calculated	0.05 half of US growth	-0.15 -1.5% /year	0.10 same as USA	0.20 twice USA	0.12 assumed
2014	227.5 USDA B. line	259.1	7,478.5	36.3	46.6	2,619.2
	227.5 US\$ bill.	318.9 US\$ bill.	67.2 US\$ bill.	28.9 US\$ bill.	46.6 US\$ bill.	316.5
C. De minimis thresholds based on estimated 2000-02 VOP						
10% of VOP	19.4	24.7	897.8	3.3	3.9	
5% of VOP	9.7	12.3	448.9	1.7	1.9	198.8 8.5% of VOP
D. De minimis thresholds based on estimated 2014 VOP						
10% of VOP	22.7	25.9	747.9	3.6	4.7	
5% of VOP	11.4	13.0	373.9	1.8	2.3	222.6 8.5% of VOP
2.5% of VOP	5.7	6.5	187.0	0.9	1.2	
8.5% of VOP						
E. Blue box entitlement fixed 2007-14 (based on value of production in assumed base period 2000-02)						
5% of VOP	9.7	12.3	448.9	1.7	1.9	116.9
F. Estimated "existing blue box payments"						
2001	0.0 USA/51	23.5 OECD PSE	91.1 JPN/108	0.0	0.0	0.0
2002	0.0 ass. no blue	21.5 OECD PSE	86.5 JPN/108	0.0	0.0	0.0
2003	0.0 ass. no blue	24.3 OECD PSE	90.0 assumed	0.0	0.0	0.0
2001-03		23.1	89.2			
G. Base Total AMS (Final Bound Total AMS commitment from Uruguay Round Schedules)						
2000 or 2004	19.1	67.2	3,972.9	4.3	0.9	0.0
	19.1 US\$ bill.	82.6 US\$ bill.	35.7 US\$ bill.	3.4 US\$ bill.	0.9 US\$ bill.	0.0 US\$ bill.
H. Reduction scenario on Total AMS commitment: (90-80-70) USA 80% EU 90% Japan 80% Canada 70% Brazil 60%						
	3.8 20% left	6.7 10% left	794.6 20% left	1.3 30% left	0.4 40% left	0.0 not appl.
	3.8 US\$ bill.	8.3 US\$ bill.	7.1 US\$ bill.	1.0 US\$ bill.	0.4 US\$ bill.	

Table 2. Base Data for ODS, Reduction Scenario on ODS, and Projecting 2014 ODS

	USA	EU-15	Japan	Canada	Brazil	China
A. Exchange rate	not appl.	0.8126 EUR/USD	111.273 JPY/USD	1.2587 CAD/USD	not appl.	8.2768 CNY/USD
	US\$ bill.	€ bill.	¥ bill.	C\$ bill.	US\$ bill.	RMB bill.
I. Base ODS (Overall Distorting Support)						
Final Bound Total AMS	19.1	67.2	3,972.9	4.3	0.9	0.0
Blue box component	9.7 5%VOP 00-02	23.1 pymts2001-03	448.9 5%VOP 00-02	1.7 5%VOP 00-02	1.9 5%VOP 00-02	116.9 5%VOP 00-02
PS <i>dm</i> (ass. 2000-02)	9.7 5%	12.3 5%	448.9 5%	1.7 5%	3.3 10%	198.8 8.5%
NPS <i>dm</i> (ass.2000-02)	9.7 5%	12.3 5%	448.9 5%	1.7 5%	3.3 10%	198.8 8.5%
Base ODS (sum above)	48.2	115.0	5,319.6	9.3	9.5	514.5
	48.2 US\$ bill.	141.5 US\$ bill.	47.8 US\$ bill.	7.4 US\$ bill.	9.5 US\$ bill.	62.2 US\$ bill.
J. Reduction scenario on ODS: (90-80-70-60) USA 80% EU 90% Japan 80% Canada 70% Brazil 60% China 60%						
	9.6 20% left	11.5 10% left	1,063.9 20% left	2.8 30% left	3.8 40% left	205.8 40% left
	9.6 US\$ bill.	14.1 US\$ bill.	9.6 US\$ bill.	2.2 US\$ bill.	3.8 US\$ bill.	24.9 US\$ bill.
M. 2014 ODS						
M(a). Current Total AMS (recent and 2014)						
latest notification	14.4 2001; USA/51	39.3 2001; EEC/51	730.0 2002; JPN/108	0.8 2000; CAN/53	0.1 1997; BRA/18	0 not appl.
2014	7.7 Table 7	20.0 Table 7	730.0 =2002	0.8 =2000	0.1 =1997	0 not appl.
M(b). Blue box payments (recent and 2014)						
recent notification	0 2001; USA/51	22.2 2001; EEC/51	86.5 2002; JPN/108	0 2000; CAN/53	0 1997; BRA/18	0 assumed
2014	1.8 proj. (Table 7)	3.5 proj. (Table 7)	86.5 =2002	0 =2000	0 =1997	0 assumed
M(c). PS de minimis AMS (recent and 2014) (in 2014: below 2.5% for USA, EU, Japan, Canada; 5% for Brazil; 8.5% for China)						
recent notification	0.2 2001; USA/51	0.5 2001; EEC/51	23.2 2002; JPN/108	0.2 2000; CAN/53	0.3 1997; BRA/18	0.9 1996-98
2014	0.3 Table 7	0.0 Table 7	23.2 =2002	0.2 =2000	0.3 =1997	0.9 =1996-98
M(d). NPS de minimis AMS (recent and 2014) (in 2014: below 2.5% for USA, EU, Japan, Canada; 5% for Brazil; 8.5% for China)						
recent notification	6.8 2001; USA/51	0.5 2000; EEC/49	20.4 2002; JPN/108	1.2 2000; CAN/53	0.1 1997; BRA/18	29.4 1996-98
2014	2.1 Table 7	0.5 =2000	20.4 =2000	1.2 =2000	0.1 =1997	29.4 =1996-98
M(a+b+c+d) Overall distorting support ODS (recent and 2014)						
recent notification	21.5	62.5	860.1	2.3	0.5	30.3
2014	11.8	24.1	860.1	2.3	0.5	30.3
2014	11.8 US\$ bill.	29.6 US\$ bill.	7.7 US\$ bill.	1.8 US\$ bill.	0.5 US\$ bill.	3.7 US\$ bill.

Table 3. Base Data for MDS and Projecting 2014 MDS

	USA	EU-15	Japan	Canada	Brazil	China
A. Exchange rate	not appl.	0.8126 EUR/USD	111.273 JPY/USD	1.2587 CAD/USD	not appl.	8.2768 CNY/USD
	US\$ bill.	€ bill.	¥ bill.	C\$ bill.	US\$ bill.	RMB bill.
K. Base MDS (Maximum Distorting Support): TAMS commitment+blue entitlement+NPS2/m + 1/2PS dm						
Final Bound Total AMS	19.1	67.2	3,972.9	4.3	0.9	0.0
Blue box entitlement	9.7 5%VOP 00-02	23.1 pymnts2001-03	448.9 5%VOP 00-02	1.7 5%VOP 00-02	1.9 5%VOP 00-02	116.9 5%VOP 00-02
1/2 PS <i>dm</i> (ass. 2000-02)	4.9 5%	6.2 5%	224.4 5%	0.8 5%	1.9 10%	198.8 8.5%
NPS <i>dm</i> (ass.2000-02)	9.7 5%	12.3 5%	448.9 5%	1.7 5%	3.9 10%	198.8 8.5%
Base MDS (sum above)	43.4	108.8	5,095.1	8.4	8.7	514.5
	43.4 US\$ bill.	133.9 US\$ bill.	45.8 US\$ bill.	6.7 US\$ bill.	8.7 US\$ bill.	62.2 US\$ bill.
L. 2014 MDS						
2014 Total AMS commitment (scenario USA 80%; EU 90%; Japan 80%; Canada 70%; Brazil 60%; China 60%)						
	3.8 20% left	6.7 10% left	794.6 20% left	1.3 30% left	0.4 40% left	0.0 not appl.
2014 Blue box element (5% of VOP 2000-02)						
	9.7	12.3	448.9	1.7	1.9	116.9
PS <i>de minimis</i> allowance (2.5% of 1/2 VOP; Brazil 5% of 1/2 VOP; China 8.5% of VOP since no Current TAMS)						
	2.8	3.2	93.5	0.5	1.2	222.6
NPS <i>de minimis</i> allowance (2.5% of VOP; Brazil 5% of VOP; China 8.5% of VOP)						
	5.7	6.5	187.0	0.9	2.3	222.6
2014 MDS (sum above)	22.1	28.8	1,523.9	4.3	5.8	562.2
	22.1 US\$ bill.	35.4 US\$ bill.	13.7 US\$ bill.	3.4 US\$ bill.	5.8 US\$ bill.	67.9 US\$ bill.

Table 4. Estimating U.S. Current Total AMS in 2004 and 2014

	2000 notified				2001 notified				2004 (est.)				2014 (est.)			
	AMS US\$ mill.	MPS US\$ mill.	LDP&MLG US\$ mill.	Other US\$ mill.	AMS US\$ mill.	MPS US\$ mill.	LDP&MLG US\$ mill.	Other US\$ mill.	AMS US\$ mill.	MPS US\$ mill.	LDP&MLG US\$ mill.	Other US\$ mill.	AMS US\$ mill.	MPS US\$ mill.	LDP&MLG US\$ mill.	Other US\$ mill.
Apples	175.1			175.1												
Barley	69.8		68.7	1.0	16.4		16.0	0.4	80.0		80.0		3.0		3.0	
Beef and veal																
Corn	2,756.7		2,629.0	127.6	1,269.7		1,193.5	76.2	3,158.0		3,082.0	76.0	76.0			76.0
Cotton	1,049.8		565.9	483.9	2,810.1		2,541.0	269.1	2,092.0		1,823.0	269.0	269.0			269.0
Dairy	5,070.4	4,377.5		692.8	4,483.3	4,483.2		0.1	5,485.0	4,585.0		900.0	5,301.0	5,301.0		0.0
Hogs and pigs																
Honey	29.2		28.8	0.4					0.0			0.0	0.0			0.0
Canola	82.3		71.7	10.6	23.0		22.8	0.1	0.0		0.0	0.0	0.0		0.0	0.0
Other minor oilseeds	191.3		156.0	35.3	66.8		66.8	0.0	0.0		0.0	0.0	0.0		0.0	0.0
Mohair	2.3			2.3	0.0			0.0	0.0			0.0	0.0			0.0
Oats	44.7		44.6	0.1			4.2	0.0	3.0		3.0	0.0	26.0		26.0	0.0
Peanuts	437.7	330.0		107.7	304.6	310.6		-6.0								
Pulses																
Rice	624.4		597.7	26.7	762.9		728.0	34.9	186.0		151.0	35.0	276.0		241.0	35.0
Sorghum	83.8		83.0	0.9	5.8		5.2	0.6	126.0		125.0	1.0	11.0		10.0	1.0
Soybeans	3,606.4		2,567.5	1,039.0	3,610.0		3,443.7	166.3	820.0		654.0	166.0	168.0		2.0	166.0
Sugar	1,177.5	1,132.8		44.6	1,061.0	1,031.7		29.2	1,157.0	1,128.0		29.0	1,248.0	1,219.0		29.0
Tobacco	519.1			519.1				-1.3	0.0				290.0			290.0
Wheat	847.2		830.9	16.3	189.4		176.6	12.8	99.0		86.0	13.0	280.0		267.0	13.0
Other notified products	97.7			97.7	21.7			21.7	21.7			21.7	21.7			21.7
Sum of PS AMS	16,865.4				14,627.6				13,227.7				7,969.7			
Net of <i>de minimis</i> AMS	16,802.6				14,413.1				13,128.7				7,711.7			
NPS AMS	7,278.0				6,828.2				6,014.0				2,072.0			
MLA&CCP				5,463.5				4,639.8				3,942.0				0.0
Crop Insurance				1,395.8				1,770.4				1,666.0				1,666.0
Other				418.8				418.0				406.0				406.0
PS AMS+NPS AMS	24,143.4				21,455.8				19,241.7				10,041.7			
Current Total AMS	16,802.6				14,413.1				13,128.7				7,711.7			

Sources:

2000 and 2001: U.S. notification USA/51

2004: estimated from USDA February 2004 Baseline, FAPRI 2003 Agricultural Outlook, OECD PSE database, and WASDE 12 January 2005 and FSA activity report 12 January 2005.

2014: estimated from USDA February 2004 Baseline; and tobacco: 2.9 bill. over ten years, starting in FY 2005.

Non-bold AMS amounts indicate *de minimis* AMS. Boxed cells indicate large decline from earlier year.

LDP&MLG: sum of commodity loan forfeit, marketing loan gains, loan deficiency payments, and certificate exchange gains.

Other minor oilseeds (other than canola): sum of crambe, flaxseed, mustard seed, rapeseed, safflower, sesame, sunflower.

Other notified products: sum of Apricots, Cranberries, Onions, Peaches, Pears, Potatoes, Rye, Sheep & Lamb, Tomatoes, and Wool

All other: all other products in U.S. agriculture and which are not listed in notifications.

Pulses: sum of small chickpeas, lentils, dry peas.

2014 assumptions: CCP (Countercyclical payments) claimed as blue; *de minimis* percentage 2.5%.

USA Current Total AMS 2004&2014

Table 5. Estimating EU-15 Current Total AMS in 2004 and 2014

	2000/01 (notified EU-15)				2001/02 (notified EU-15)				2004 (est. EU-15)				2014 (proj. EU-15)			
	AMS €mill.	AAP €/tonne	ref price €/tonne	quantity mill. t	AMS €mill.	AAP €/tonne	ref price €/tonne	quantity mill. t	AMS €mill.	AAP €/tonne	ref price €/tonne	quantity mill. t	AMS €mill.	AAP €/tonne	ref price €/tonne	quantity mill. t
Common wheat	2,270.7	110.3	86.5	95.6	1,236.6	101.3	86.5	83.5	1,386.8	101.3	86.5	93.7	1,588.0	101.3	86.5	107.3
Durum wheat	0.0	110.3	148.5	8.9	0.0	101.3	148.5	8.1	0.0	101.3	148.5	9.4	0.0	101.3	148.5	10.6
C. wheat, maize, barley, rye, triticale, grain sorghum	0.0				0.0				0.0				0.0			
Barley	2,194.5	110.3	67.3	51.1	1,640.4	101.3	67.3	48.2	1,671.3	101.3	67.3	49.1	1,732.0	101.3	67.3	50.9
Maize	706.7	110.3	91.9	38.5	379.6	101.3	91.9	40.3	369.3	101.3	91.9	39.3	383.3	101.3	91.9	40.8
Rye	238.0	110.3	67.3	5.5	212.9	101.3	67.3	6.3	0.0				0.0			
Oats	0.0	110.3	112.5	6.8	0.0	101.3	112.5	6.2	0.0				0.0			
Sorghum	16.2	110.3	85.7	0.7	10.2	101.3	85.7	0.7	10.0	101.3	85.7	0.6	10.4	101.3	85.7	0.7
Triticale	210.1	110.3	67.3	4.9	179.4	101.3	67.3	5.3	161.4	101.3	67.3	4.8	167.6	101.3	67.3	4.9
Sub-tot cereals	5,636.1				3,659.1				3,598.8				3,881.2			
Rice	393.1	298.4	143.3	2.5	396.6	298.4	143.3	2.6	17.4	150	143.3	2.6	17.4	150	143.3	2.6
White Sugar	5,808.6	631.9	193.8	13.9	5,720.1	631.9	193.8	14.1	5,720.1	631.9	193.8	14.1	2,219.8	421	193.8	11.9
SMP	1,507.6	2,055.2	684.7	1.1	1,370.5	2,055.2	684.7	1.0	1,258.8	1,952.4	684.7	1.0	785.0	1,746.9	684.7	0.7
Butter	4,443.5	3,282.0	943.3	1.9	4,443.5	3,282.0	943.3	1.9	3,796.2	3,052.3	943.3	1.8	2,585.0	2,463.9	943.3	1.7
Beef	11,190.3	3,242.0	1730	7.4	9,707.2	3,013.0	1730	7.6	0.0	1,560.0	1730	7.4	0	1,560.0	1730	7.6
Milk	not applicable				0.0 payment (dm AMS)				0.0 payment (dm AMS)				0 payment (dm AMS)			
Olive Oil	2,070.4	3837.7	2851.8	2.1	2,675.7	3837.7	2851.8	2.7	2,070.4	3837.7	2851.8	2.1	920.0	olive grove payment		
Tobacco	963.9				951.6	premium payment			951.6	premium payment			0			
Apples	2,248.9				2,059.5	EMS			2,059.5	EMS			2,059.5	EMS		
Tomatoes	2,952.8				1,944.2	EMS			1,944.2	EMS			1,944.2	EMS		
Wine	806.6				891.6	EMS			891.6	EMS			891.6	EMS		
Cotton	795.0				575.1	EMS			575.1	EMS			0.0			
Dried fodder	306.3				317.2	payment			317.2	payment			145.6	payment		
All other	4,729.2				4,569.3	payments and EMS			4,569.3	payments and EMS			4,569.3	payments and EMS		
Sum of PS AMS	43,852.2				39,281.3				27,770.2				20,018.7			
Net of dm AMS	43,852.2				39,281.3				23,956.6				20,001.3			
NPS AMS	537.7	<i>de minimis</i>			573.5	<i>de minimis</i>			600.0	<i>de minimis</i>			600.0	<i>de minimis</i>		
Current Tot AMS	43,852.2				39,281.3				23,956.6				20,001.3			

Sources: 2000/01: EC notification EEC/49; 2001/02: EEC/51; 2004: estimated from changes under Agenda 2000 and 2003 CAP reform; 2014: estimated from further changes under 2003 and 2004 CAP reform.
2014 assumptions: *de minimis* percentage 2.5%. Note: boxed cells indicate particularly large decline.

Table 6. Major Elements of 2014 Current Total AMS (projection) for USA and EU-15

USA (\$ bill.)		EU-15 (€bill.)	
Corn	0.0	Cereals	3.9
Cotton	0.3	Sugar	2.2
Dairy (market price support)	5.3	Skim milk powder	0.8
Peanuts	0.0	Butter	2.6
Rice	0.3	Beef	0.0
Soybeans	0.0	Olive oil	0.9
Sugar	1.2	Apples	2.0
Tobacco	0.3	Tomatoes	1.9
Wheat	0.3	Wine	0.9
All other products	0.0	All other products	4.8
Current Total AMS 2014	7.7	Current Total AMS 2014	20.0

Source: Tables 4 and 5.

Table 7. Calculation of 2014 Support for USA and EU-15

		USA (\$ bill.)		EU-15 (€bill.)	
row	Base Amounts				
1	Final Bound Total AMS 2000	19.1		67.2	=US\$ bill. 82.6
2	PS de minimis	9.7	5% of VOP 2000-02	12.3	5% of VOP 2000-02
3	NPS de minimis	9.7	5% of VOP 2000-02	12.3	5% of VOP 2000-02
4	Blue box	9.7	5% of VOP 2000-02	23.1	est. payment 2001-03
5	Base Overall Distorting Support (sum of rows 1, 2, 3 and 4)	48.2		115.0	=US\$ bill. 141.5
<u>2014 Support</u>					
6	2014 Current Total AMS	7.7	from Table 6	20.0	from Table 6
7	2014 Blue payments	1.8	projected CCP	3.5	projection (see note)
8	2014 PS de minimis used	0.3		0.3	same as 2001/02
9	2014 NPS de minimis used	2.1		0.5	same as 2001/02
10	2014 Current ODS (= End ODS)	11.9	sum of rows 6, 7, 8,9	24.3	sum of rows 6, 7, 8, 9
<u>Possible cuts</u>					
11	(2014 Current Total AMS)/ (Base TAMS commitment)	40%	row 6/row 1	30%	row 6/row 1
12	Possible Total AMS cut	60%	100% less row 11	70%	100% less row 11
13	(2014 Current ODS)/ (Base Overall Distorting Support)	25%	row 10/row 5	21%	row 10/row 5
14	Possible Overall Reduction	75%	100% less row 13	89%	100% less row 13

Source: See Annex B and Tables 4 and 5.

Note: Row 1: Table 8. Rows 2, 3, and 4: see Annex B and Table 1. Row 6: Table 6. Rows 8 and 9: See Annex B and Table 2. Row 7: for USA: estimated 2014 Counter-Cyclical Payments, based on USDA February 2004 baseline; for EU-15: assuming 2014 total direct payments (other than blue) are €31 bill. and blue payments account for 10% of total direct payments (including blue), yields blue payments of €3.5 bill.

Table 8. Calculating the 2014 Cap on *Overall Distorting Support* (ODS): 90-80-70-60 Harmonizing Tiers

	USA	EU-15	Japan	Canada	Brazil	China
Base ODS (bill.)	\$48	€115	¥5,310	C\$9	\$11	RMB 515
<i>in US\$ bill.</i>	\$48	\$142	\$48	\$7	\$11	\$62
Cut by	80%	90%	80%	70%	60%	60%
2014 ODS cap (bill.)	\$9.6	€11.5	¥1,062	C\$2.8	\$4.3	RMB 206
<i>in US\$ bill.</i>	\$10	\$14	\$10	\$2	\$4	\$25

Note: Base ODS is sum of Final Bound Total AMS, permitted *de minimis* level, and blue box entitlement. 2014 ODS cap is the commitment on ODS after the 90-80-70-60 cut.

Sources: Table 2.

Final Bound Total AMS: Table 1 and Table 9. Permitted *de minimis* level: 5+5=10% of value of production (USA, EU, Japan, Canada), 10+10=20% (Brazil), 8.5+8.5=17% (China). Details in Table 1.

Blue box entitlement: 5% of value of production (EU: estimated blue payments in 2001-03). Details in Table 1.

Exchange rates: See Annex A and Table 1.

Table 9. Calculating the 2014 Cap on *Total AMS* (TAMS): 90-80-70-60 Harmonizing Tiers

	USA	EU-15	Japan	Canada	Brazil	China
Base TAMS (bill.)	\$19	€67	¥3,973	C\$4	\$1	0
<i>in US\$ bill.</i>	\$19	\$83	\$36	\$3	\$1	0
Cut by	80%	90%	80%	70%	60%	not applicable
2014 TAMS cap (bill.)	\$3.8	€6.7	¥795	C\$1.3	\$0.4	0
<i>in US\$ bill.</i>	\$3.8	\$8.3	\$7.1	\$1.0	\$0.4	0

Note: Base TAMS is Final Bound Total AMS commitment in 2000 (USA, EU-15, Japan, and Canada) or 2004 (Brazil). 2014 TAMS cap is the commitment on Total AMS after the 90-80-70-60 cut.

Sources: Table 1 (from Members' Schedules, Part IV, Section I)

Exchange rates: See Annex A and Table 1.

Table 10. 2014 Support Projections as Percentage of Base Total AMS and Base ODS

		USA	EU	Japan	Canada	Brazil	China
2014 Current Total AMS	bill.	\$7.7	€20.0	¥730	C\$0.8	\$0.1	0
2014 Blue payments	bill.	\$1.8	€3.5	¥87	0	0	0
2014 PS <i>de minimis</i> used	bill.	\$0.3	€0.3	¥23	C\$0.2	\$0.3	RMB 0.9
2014 NPS <i>de minimis</i> used	bill.	\$2.1	€0.5	¥20	C\$1.2	\$0.1	RMB 29.4
2014 Current ODS (sum of above)	bill.	\$11.9	€24.3	¥860	C\$2.3	\$0.5	RMB 30.3
2014 Current Total AMS/ Base TAMS	%	40%	30%	18%	20%	9%	not applicable
2014 Current ODS/ Base ODS	%	25%	21%	16%	25%	5%	6%

Sources: Support projections for USA and EU: See Annex B and Table 7. Support projections for other Members: support in a recent notification is assumed to continue unchanged in 2014 (details in Tables 1 and 2). Recent notifications: Japan: G/AG/N/JPN/108; Canada: G/AG/N/CAN/53; G/AG/N/BRA/18; China: supporting tables for accession in WT/ACC/CHN/38/Rev.3.

Table 11. Changes in Entitlements to Distorting Support under 90-80-70-60 Scenario (US\$ bill.)

		USA	EU-15	Japan	Canada	Brazil	China	Total (six countries)
ODS and MDS: Base and 2014								
a	Base ODS (Table 8)	48	142	48	7	10	62	316
b	Base MDS (details in Table 3)	43	134	46	7	9	62	301
c	2014 commitment on ODS (Table 8)	10	14	10	2	4	25	65
d	2014 MDS (details in Table 3)	22	35	14	3	6	68	148
Changes in ODS and MDS								
e	a – c Base ODS –2014 commitment on ODS	39	127	38	5	5	37	252
f	= - e/a % change (as per scenario assumption)	-80%	-90%	-80%	-70%	-60%	-60%	-80%
g	b – d Base MDS – 2014 MDS	21	99	32	3	3	-6	152
h	= - g/b % change in MDS	-49%	-74%	-70%	-49%	-33%	9%	-51%
i	d – c Further reduction from Base MDS, resulting from ODS commitment	13	21	4	1	2	43	84
j	= i/b % change	-29%	-16%	-9%	-18%	-17%	-69%	-28%

Note: Calculated from unrounded data.

ODS: Overall Distorting Support (see text). Calculated in accordance with 2004 Framework provisions for Overall Reduction.

MDS: Maximum Distorting Support (see text). Recognizes that a PS AMS cannot at the same time be *de minimis* and part of Current Total AMS.

Base MDS = UR Final Bound Total AMS commitment + blue entitlement (5% of 2000-02 VOP) + NPS *de minimis* allowance (percentage of 2000-02 VOP) + PS *de minimis* allowances on products accounting for an arbitrary 50% (100% for China) of sector's VOP in 2000-02. *De minimis* percentages: USA, EU, Japan, Canada: 5%, Brazil 10%, China 8.5%.

2014 MDS = Final Bound Total AMS (after DDA reductions) + blue entitlement (5% of 2000-02 VOP) + NPS *de minimis* allowance (percentage of VOP in 2014) + PS *de minimis* allowances on products accounting for an arbitrary 50% (100% for China) of sector's VOP in 2014. *De minimis* percentages: USA, EU, Japan, Canada: 2.5%, Brazil 5%, China 8.5%.

China's 2014 MDS (row d) is larger than the Base MDS (row b). The MDS increases by \$6 bill. because China has no Total AMS to reduce, the blue box entitlement stays fixed, and the *de minimis* percentage is assumed to remain fixed at 8.5% (assuming that almost all of China's *de minimis* support is allocated to subsistence and resource-poor farmers). The assumed 12% increase in 2014 value of production increases the *de minimis* component of MDS.